

1 **ABSTRACT**

2 Methods and structures for parsing an Extensible Markup Language (XML)
3 data stream are described. In the described embodiment, one or more schema
4 modules are defined and are associated with HTTP requests that are received from
5 a client. The schema module(s) has a function that determines whether an XML
6 data stream conforms to a given schema that is associated with the HTTP request.
7 If a portion of the XML data stream does not conform to the given schema, then
8 the schema module disregards that XML data stream portion. In the described
9 embodiment, each schema module has a plurality of states associated therewith.
10 Each state is associated with one or more schema requirements that relate to a
11 particular element that is evaluated by the schema module. Each state is different
12 from the other states and the number of states is a function of the number of layers
13 or elements that are contained within a particular XML data stream.

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